

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

PLAYTEX PRODUCTS, INC.,

Plaintiff,

-against-

THE PROCTER & GAMBLE COMPANY,

Defendant.

1:08-CV-03417 (WHP) (THK)

DEFENDANT THE PROCTER &
GAMBLE COMPANY'S
ANSWER, AFFIRMATIVE
DEFENSES AND
COUNTERCLAIMS TO THE
COMPLAINT OF PLAINTIFF
PLAYTEX PRODUCTS, INC.
ECF CASE

Defendant, The Procter & Gamble Company ("P&G"), by its attorneys Jones Day, for its answer, affirmative defenses and counterclaims to the complaint of Plaintiff Playtex Products, Inc. ("Playtex"), alleges:

INTRODUCTION AND THE PARTIES

1. P&G admits that Playtex alleges violations of the patent laws of the United States, but otherwise denies the allegations of this paragraph.

2. Admitted.

3. Admitted.

JURISDICTION AND VENUE

4. Admitted.

5. P&G admits that this Court has personal jurisdiction over P&G, but otherwise denies the allegations of this paragraph.

6. Admitted.

FIRST CLAIM FOR RELIEF
(Infringement of U.S. Patent 6,890,324)

7. P&G hereby refers to and incorporates by reference as if fully set forth herein its answers to the allegations of paragraphs 1-6 of the Complaint.

8. P&G admits that on its face United States Patent No. 6,890,324 (the “’324 patent”) is assigned to Playtex, that the ‘324 patent is entitled “Tampon Applicator,” and that the ‘324 patent issued on May 10, 2005. P&G is without sufficient information to admit or deny the remaining allegations of this paragraph, and therefore denies those allegations.

9. P&G admits that it does not have an express license under the ‘324 patent, but otherwise denies the allegations of this paragraph.

10. P&G, the defendant named in this action, does not manufacture, import, offer for sale or sell products. All such activities regarding Tampax Pearl products are conducted by Tambrands, Inc. (manufacturing) or Procter & Gamble Distributing LLC (distributing, selling and offering for sale), both of which are P&G subsidiaries, but are not named defendants in this action. P&G denies that P&G, Tambrands, Inc. or Procter & Gamble Distributing LLC have infringed the ‘324 patent in any way. P&G further denies that any Tampax Pearl products are imported into the United States, as alleged in this paragraph. P&G admits that it uses some Tampax Pearl products for research purposes, but denies that such use constitutes infringement of the ‘324 patent, and denies that Tampax Pearl products infringe the ‘324 patent in any way.

11. P&G, the defendant named in this action, does not manufacture, import, offer for sale or sell products. All such activities regarding Tampax Pearl products are conducted by Tambrands, Inc. (manufacturing) or Procter & Gamble Distributing LLC (distributing, selling and offering for sale), both of which are P&G subsidiaries, but are not named defendants in this

action. P&G denies that P&G, Tambrands, Inc. or Procter & Gamble Distributing LLC have contributed to or induced infringement of the '324 patent in any way. P&G further denies that any Tampax Pearl products are imported into the United States, as alleged in this paragraph. P&G admits that it uses some Tampax Pearl products for research purposes, but denies that such use contributes to or induces infringement of the '324 patent, and P&G denies that Tampax Pearl products infringe the '324 patent in any way.

12. P&G admits that as of October 9, 2006, it was aware of Playtex's allegation that P&G's Tampax Pearl product infringes the '324 patent. P&G otherwise denies the allegations of this paragraph.

13. Denied.

14. Denied.

15. Denied.

PRAYER FOR RELIEF

P&G denies that Playtex is entitled to any relief whatsoever for its claim.

P&G'S AFFIRMATIVE DEFENSES

First Affirmative Defense

Playtex's Claim fails to state a claim for which relief can be granted.

Second Affirmative Defense

No valid claim of the '324 patent is infringed, either directly or indirectly, by the manufacture, sale, offer for sale, importation, or use of any of P&G's products, or any other act of P&G.

Third Affirmative Defense

Each and every claim of the '324 patent is invalid on the grounds that the purported invention fails to meet the conditions for patentability within the meaning of the patent laws, Title 35 §§ 101 *et seq.*, including, but not limited to, sections 102, 103 and 112 thereof.

Fourth Affirmative Defense

Some or all of Playtex's claims are barred under the doctrine of equitable estoppel.

Fifth Affirmative Defense

Some or all of Playtex's claims are barred under the doctrine of judicial estoppel.

Sixth Affirmative Defense

Some or all of Playtex's claims are barred under the doctrine of laches.

P&G'S COUNTERCLAIMS

1. These counterclaims arise under the patent laws of the United States, 35 U.S.C. § 1, *et seq.*, and 28 U.S.C. § 2201, *et seq.* Subject matter jurisdiction is based upon 28 U.S.C. §§ 1331, 1338(a), 2201 and 2202.

2. P&G hereby refers to and incorporates by reference as if fully set forth herein each response and affirmative defense stated above.

3. Playtex alleges in its Complaint that P&G has infringed and is infringing the '324 patent.

4. This Court has personal jurisdiction over Playtex by virtue of Playtex's filing of its Complaint against P&G in this Court.

5. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b).

6. An actual and justiciable controversy exists between P&G and Playtex concerning the non-infringement and invalidity of the '324 patent by virtue of Playtex's naming of P&G as a defendant in this action.

Count I - Declaration Of Non-Infringement Of The '324 Patent

7. P&G hereby refers to and incorporates by reference as if fully set forth herein the allegations of paragraphs 1-6 of its counterclaims.

8. P&G has not directly or indirectly infringed, induced infringement of, or contributed to the infringement of any valid claim of the '324 patent.

9. P&G is entitled to a declaratory judgment that it has not infringed, and is not infringing any valid claim of the '324 patent, directly or indirectly.

Count II - Declaration Of Invalidity Of The '324 Patent

10. P&G hereby refers to and incorporates by reference as if fully set forth herein the allegations of paragraphs 1-9 of its counterclaims.

11. The claims of the '324 patent are invalid under 35 U.S.C. § 1, *et seq.*, including but not limited to, sections 102, 103 and 112.

12. P&G is entitled to a declaratory judgment that the claims of the '324 patent are invalid.

Count III– Infringement Of United States Patent No. 7,081,110

13. P&G hereby refers to and incorporates by reference as if fully set forth herein the allegations of paragraphs 1-12 of its counterclaims.

14. P&G is the owner of all right, title, and interest in United States Patent No. 7,081,110 entitled "Applicator Having An Indented Fingergrasp With Raised Portions" (the "'110 patent"). The '110 patent was duly and properly issued by the United States Patent and

Trademark Office on July 25, 2006. P&G has the right to bring actions for infringement of the '110 patent and to obtain equitable relief and recover damages for that infringement. A copy of the '110 patent is attached hereto as Exhibit A.

15. In violation of 35 U.S.C. § 271, Playtex has, prior to commencement of this action, directly infringed and continues to directly infringe the '110 patent by making, importing, using, offering for sale and selling its line of Playtex SPORT tampons within the United States and this judicial district.

16. Playtex has and continues to contribute to, and induce, the infringement of the '110 patent by making, importing, using, offering for sale, and selling its line of Playtex SPORT tampons within the United States and this judicial district.

17. Playtex has been on actual notice that its line of Playtex SPORT plastic tampons infringe the '110 patent since at least the fourth quarter of 2006.

18. Playtex has been on constructive notice of the '110 patent since the patent's issuance on July 25, 2006.

19. P&G has been damaged by Playtex's infringement of the '110 patent, and has been and continues to be damaged by such infringement.

20. P&G has suffered and continues to suffer irreparable harm and will continue to do so unless Playtex is enjoined therefrom by this Court.

21. Playtex's infringement of the '110 patent is knowing and willful.

PRAYER FOR RELIEF

P&G respectfully prays that this Court enter judgment in its favor and against Playtex as follows:

- A. Dismissing with prejudice Playtex's Complaint in its entirety;
- B. Denying all remedies and relief sought by Playtex in its Complaint;

C. Declaring that P&G has not infringed, and is not infringing, any valid claim of the '324 patent;

D. Declaring that P&G has not induced, and is not inducing, infringement of any valid claim of the '324 patent;

E. Declaring that P&G has not contributed to, and is not contributing to, the infringement of any valid claim of the '324 patent;

F. Declaring that P&G has not willfully infringed any valid claim of the '324 patent;

G. Declaring that all of the claims of the '324 patent are invalid;

H. Holding that all of the claims of the '110 patent are valid and enforceable;

I. Holding that the '110 patent has been infringed by Playtex and that such infringement has been willful;

J. Enjoining Playtex from further infringing the '110 patent;

K. Awarding damages adequate to compensate P&G for the patent infringement that has occurred, together with pre-judgment interest and costs;

L. Awarding to P&G all other damages permitted by 35 U.S.C. § 284, including increased damages up to three times the amount of compensatory damages found;

M. Finding that this case is exceptional and award P&G its costs and reasonable attorneys' fees incurred in this action as provided by 35 U.S.C. § 285; and/or

N. Granting P&G such other and further relief that this Court deems just and proper.

JURY DEMAND

P&G demands a trial by jury for all issues so triable.

Dated: April 28, 2008

Jones Day

By: s/ Clark Craddock

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CERTIFICATE OF SERVICE

Clark Craddock, a lawyer admitted to the bar of this Court, certifies under penalty of perjury pursuant to 28 U.S.C. § 1746, that on April 28, 2008, she caused the attached ANSWER AND COUNTERCLAIMS OF DEFENDANT THE PROCTER & GAMBLE COMPANY TO PLAINTIFF'S COMPLAINT to be served electronically upon:

Matthew B. Lehr
Davis Polk & Wardwell
1600 El Camino Real
Menlo Park, California 94025

and

Benjamin Allee
Davis Polk & Wardwell
450 Lexington Avenue
New York, New York 10017

All parties who have been registered for electronic service in this case have also been served electronically.

Dated: April 28, 2008

s/ Clark Craddock

EXHIBIT A



US007081110B2

(12) **United States Patent**
Karapasha

(10) **Patent No.:** **US 7,081,110 B2**
(45) **Date of Patent:** **Jul. 25, 2006**

(54) **APPLICATOR HAVING AN INDENTED FINGERGRIP WITH RAISED PORTIONS**

(75) Inventor: **Nancy Karapasha**, Monfort Heights, OH (US)

(73) Assignee: **The Procter & Gamble Company**, Cincinnati, OH (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 300 days.

5,290,501 A	3/1994	Klesius	
5,346,468 A *	9/1994	Campion et al.	604/13
5,389,067 A *	2/1995	Rejai	604/14
5,395,308 A *	3/1995	Fox et al.	604/15
6,045,526 A *	4/2000	Jackson	604/15
6,302,861 B1	10/2001	Tweddell, III et al.	
6,413,247 B1	7/2002	Carlucci	
6,423,025 B1	7/2002	Buzot	
6,478,764 B1	11/2002	Suga	
6,890,324 B1	5/2005	Jackson et al.	
2003/0236161 A1	12/2003	Fedyk et al.	
2003/0236485 A1 *	12/2003	Fedyk et al.	604/11
2005/0070839 A1	3/2005	Jackson et al.	

(21) Appl. No.: **10/621,709**

(22) Filed: **Jul. 17, 2003**

(65) **Prior Publication Data**

US 2005/0015041 A1 Jan. 20, 2005

FOREIGN PATENT DOCUMENTS

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GB	684290	12/1952
GB	2 166 656 A	5/1986
GB	2166656 A *	5/1986

(Continued)

(51) **Int. Cl.**
A61F 13/20 (2006.01)

(52) **U.S. Cl.** **604/904**; 604/15; 604/385.17; 604/11; D24/141; 600/29

(58) **Field of Classification Search** 604/11-18, 604/904, 59, 385.17; 600/29; 206/529; D24/141; 424/430-431

See application file for complete search history.

OTHER PUBLICATIONS

PCT International Search Report dated Nov. 17, 2004.

Primary Examiner—Tatyana Zalukaeva

Assistant Examiner—L C Hill

(74) *Attorney, Agent, or Firm*—Bridget Murray; Kevin C. Johnson; David M. Weirich

(56) **References Cited**

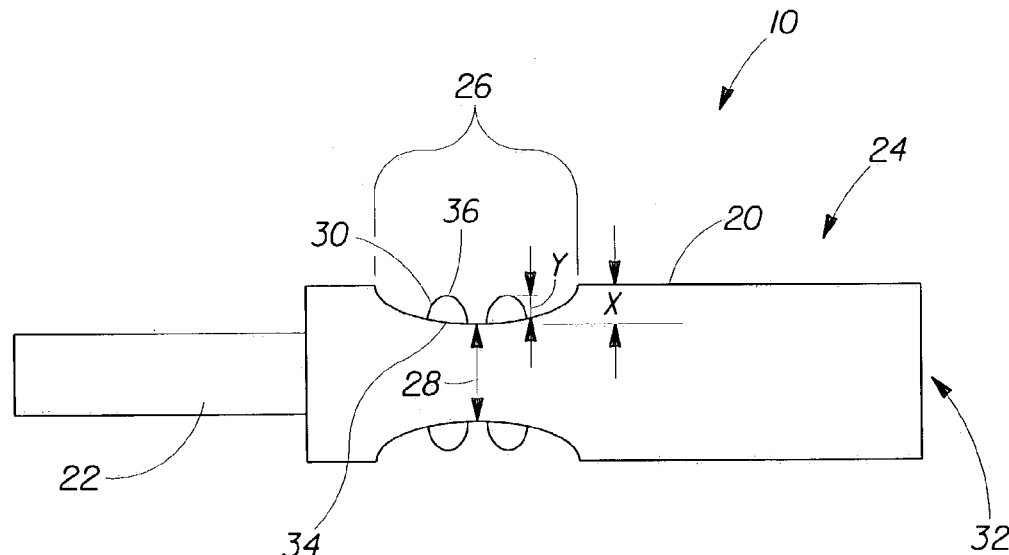
U.S. PATENT DOCUMENTS

2,489,502 A	11/1949	Ruth	
3,351,060 A	11/1967	Woskin	
3,628,533 A	12/1971	Loyer	
3,831,605 A	8/1974	Fournier	
3,895,634 A	7/1975	Berger	
4,536,178 A *	8/1985	Lichstein et al.	604/15
4,573,963 A	3/1986	Sheldon	
4,573,964 A	3/1986	Huffman	
4,891,042 A	1/1990	Melvin	

(57) **ABSTRACT**

A tampon applicator including an insertion member adapted to house an absorbent tampon and receive a plunger. The insertion member has an outer surface and a fingergrip region disposed about the outer surface. The fingergrip region includes an indentation region having a depth dimension X. The indentation region includes raised portions having a height dimension Y, the height dimension Y being less than or equal to the depth dimension X.

20 Claims, 2 Drawing Sheets



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FOREIGN PATENT DOCUMENTS

WO	WO 99/04741	2/1999	WO	WO 03/026529 A2	4/2003
WO	WO 03/002048 A1	1/2003	ZA	777411	12/1977

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U.S. Patent

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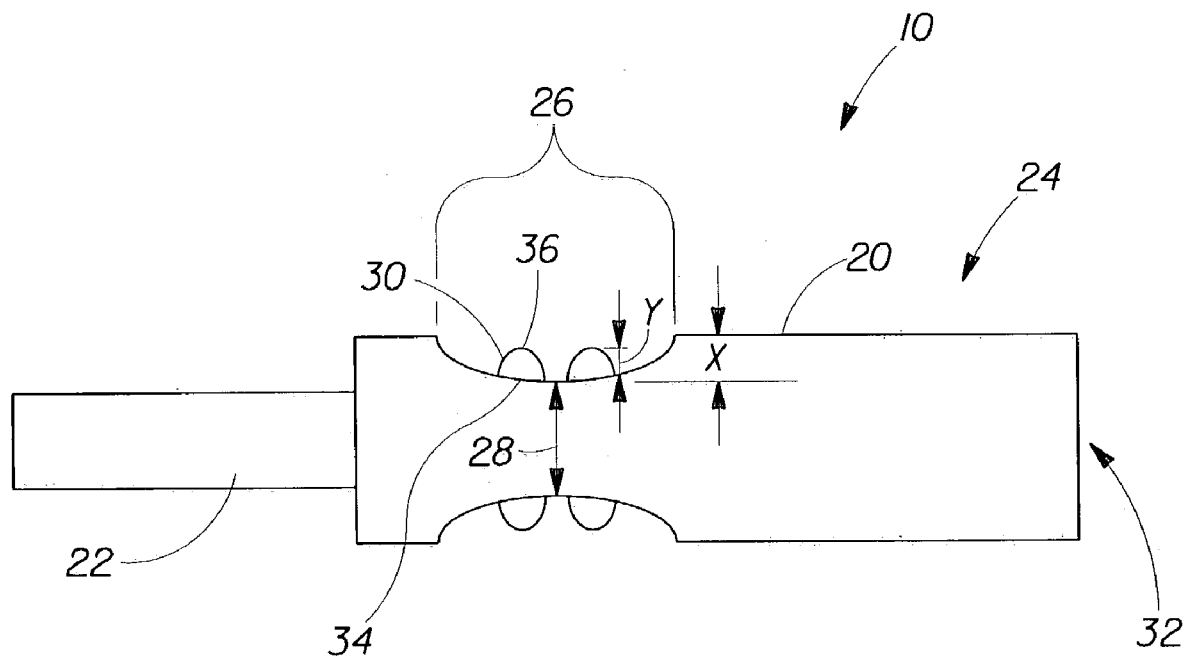


Fig. 1

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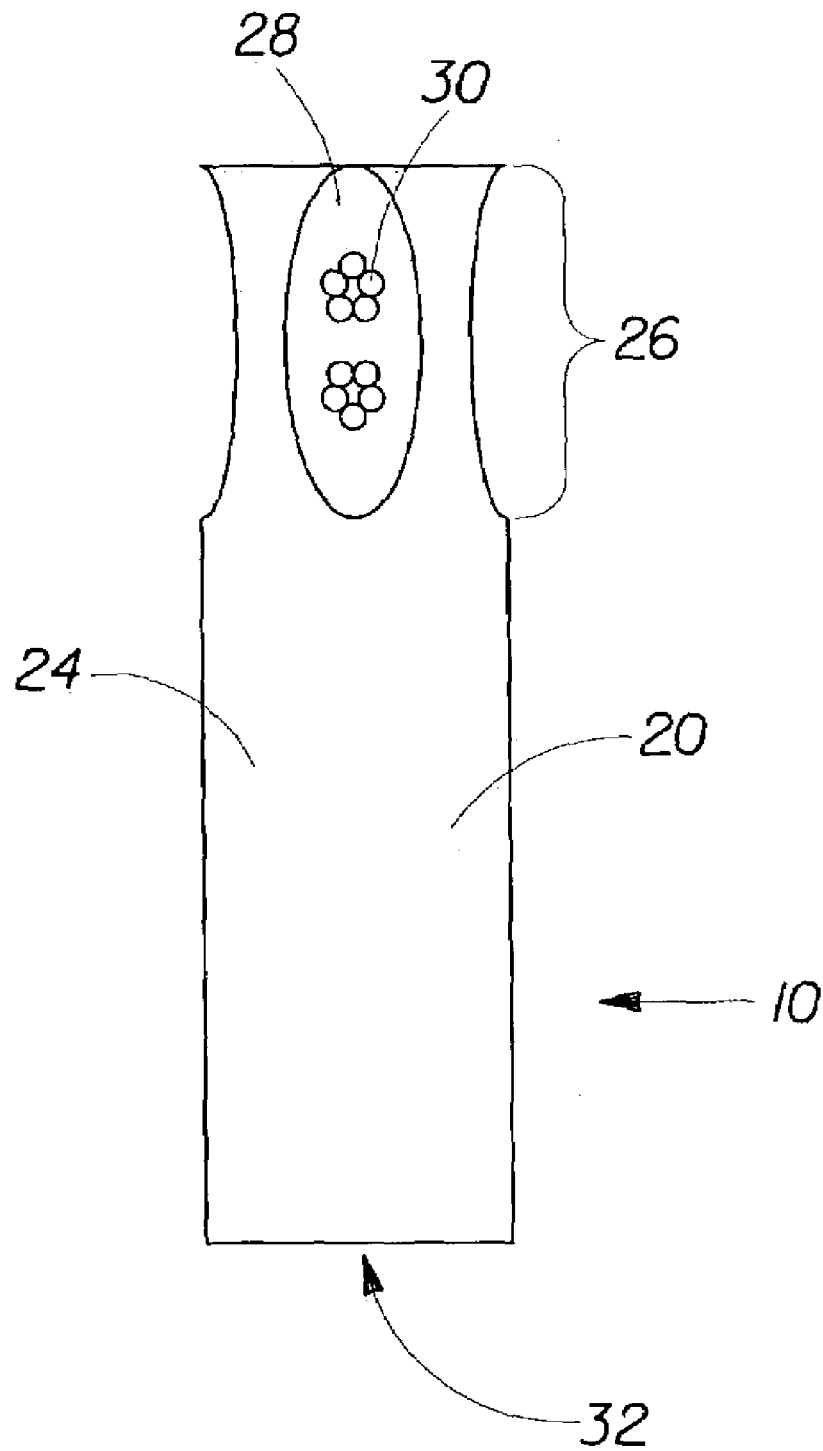


Fig. 2

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**APPLICATOR HAVING AN INDENTED
FINGERGRIP WITH RAISED PORTIONS**

FIELD OF THE INVENTION

The present invention relates to an insertion device capable of housing an insertable element having an improved fingergrip region to improve the consumer's ability to securely hold the applicator during insertion of an insertable element.

BACKGROUND OF THE INVENTION

As known in the art, applicators are used to both house materials intended to be inserted in a body cavity, such as a tampon or medicaments and to expel the material into the intended orifice. Typically applicators comprise an insertion member and a plunger. The material to be expelled from the applicator, such as an absorbent tampon, is positioned within the insertion member. The insertion member has a first end for insertion of the tampon and a second end for receipt of the plunger. To use the applicator, the consumer will position the first end appropriately, grasp the insertion member, and move the plunger in the insertion member towards the first end to insert the tampon. Some applicators also include a fingergrip configuration that is located on the insertion member, which allows the consumer to more securely hold the applicator during insertion of a material into the body cavity.

Various fingergrip configurations have been proposed to facilitate the handling of the applicator and to improve the insertion experience. One approach is a tampon applicator having an integral fingergrip that is formed by embossing the outside surface of the insertion member of the tampon applicator. The embossed portion of the applicator may take the form of a series of circumferential rings or a series of discrete raised dots. Examples of such fingergrips can be found in U.S. Pat. No. 6,045,526 issued to Jackson; U.S. Pat. No. 5,395,308 issued to Fox, et al.; U.S. Pat. No. 5,290,501 issued to Klesius; U.S. Pat. No. 4,573,964 issued to Huffman; U.S. Pat. No. 4,573,963 issued to Sheldon; U.S. Pat. No. 4,891,042 issued to Nelvin, et al.; U.S. Pat. No. 4,412,833 issued to Weigner, et al.; U.S. Pat. No. 3,895,634 issued to Berger; U.S. Pat. No. 3,628,533 issued to Berger; U.S. Pat. No. 3,628,533 issued to Leyer; U.S. Pat. No. 2,922,423 issued to Rickard; U.S. Pat. No. 2,587,717 issued to Fourness; and U.S. Pat. No. 2,489,502 issued to Ruth.

Another approach to the gripping problem is found in U.S. Pat. No. 3,575,169 issued to Voss, et al., which provides separate raised elements that are applied to an outer tube of a tampon applicator to provide a fingergrip. The elements can be formed of plastic, rubber, ceramic, or other materials, and can be affixed to the outer tube by interference fit or by bonding.

While many have tried to design and manufacture tampon applicators having these improved qualities, there still remains a need for a tampon applicator that has gripping features that provide limited resistance to finger slip during the insertion and the expulsion of the tampon applicator.

SUMMARY OF THE INVENTION

The present invention comprises a tampon applicator comprising an insertion member adapted to house an absorbent tampon and receive a plunger. The insertion member has an outer surface and a fingergrip region disposed about the outer surface. The fingergrip region comprises an inden-

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tion region having a depth dimension X. The indentation region comprises raised portions having a height dimension Y, the height dimension Y is less than or equal to the depth dimension X.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side view of the applicator of the present invention.

FIG. 2 is a perspective view of the applicator of the present invention.

DETAILED DESCRIPTION OF THE
INVENTION

As used herein "applicator" refers to a device or implement that facilitates the insertion of a tampon, medicament, treatment device, visualization aid, or other into an external orifice of a mammal, such as the vagina, rectum, ear canal, nasal canal, or throat. Non-limiting specific examples of such include any known hygienically designed applicator that is capable of receiving a tampon may be used for insertion of a tampon, including the so-called telescoping, tube and plunger, and the compact applicators, an applicator for providing medicament to an area for prophylaxis or treatment of disease, a spectroscopy containing a microcamera in the tip connected via fiber optics, a speculum of any design, a tongue depressor, a tube for examining the ear canal, a narrow hollow pipe for guiding surgical instruments, and the like.

The term "joined" or "attached," as used herein, encompasses configurations in which a first element is directly secured to a second element by affixing the first element directly to the second element; configurations in which the first element is indirectly secured to the second element by affixing the first element to intermediate member(s) which in turn are affixed to the second element; and configurations in which the first element is integral with the second element; i.e., the first element is essentially part of the second element.

As used herein the term "tampon," refers to any type of absorbent structure that is inserted into the vaginal canal or other body cavities for the absorption of fluid and/or gas therefrom, to aid in wound healing, or for the delivery of active materials, such as medicaments, or moisture. The tampon may be compressed into a generally cylindrical configuration in the radial direction, axially along the longitudinal axis or in both the radial and axial directions. While the tampon may be compressed into a substantially cylindrical configuration, other shapes are possible. These may include shapes having a cross section that may be described as rectangular, triangular, trapezoidal, semi-circular, hourglass, serpentine, or other suitable shapes. Tampons have an insertion end, withdrawal end, a length, a width, a longitudinal axis and a radial axis. The tampon's length can be measured from the insertion end to the withdrawal end along the longitudinal axis. A typical compressed tampon for human use is 30–60 mm in length. A tampon may be straight or non-linear in shape, such as curved along the longitudinal axis. A typical compressed tampon is 8–20 mm wide. The width of a tampon, unless otherwise stated in the specification; corresponds to the length across the largest cylindrical cross-section, along the length of the tampon.

The term "vaginal cavity," "within the vagina," and "vaginal interior," as used herein, are intended to be synonymous and refer to the internal genitalia of the mammalian female in the pudendal region of the body. The term

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“vaginal cavity” as used herein is intended to refer to the space located between the introitus of the vagina (sometimes referred to as the sphincter of the vagina or hymeneal ring,) and the cervix. The terms “vaginal cavity,” “within the vagina” and “vaginal interior,” do not include the interlabial space, the floor of vestibule or the externally visible genitalia.

As used herein, “cm” is centimeters, and “mm” is millimeters.

FIG. 1 and FIG. 2 show the tampon applicator of the present invention. The tampon applicator 10 includes an insertion member 20 adapted to house an absorbent tampon and a plunger 22. The insertion member has an outer surface 24 and a fingergrasp region 26 disposed about the outer surface 24. The fingergrasp region 26 comprises an indentation region 28 having a depth dimension X. The indentation region 28 comprises raised portions 30 having a height dimension Y, the height dimension Y being less than or equal to the depth dimension X. When a consumer inserts the insertion member 20 into her vaginal cavity, her fingers and/or thumb are urged towards the insertion end 32 due to frictional forces between the insertion member 20 and the walls of the body cavity. The combination of the indentation region 28 and the raised portions 30 and their respective dimensions in relation to each other provides a secure hold and improved handling of the applicator during insertion.

The insertion member 20 is in the form of a spirally wound, convolutely wound or longitudinally seamed hollow tube, which is formed from paper, paperboard, cardboard or a combination thereof. The insertion member 20 may also be injection molded or formed from flexible plastic, such as thermoformed from plastic sheet or folded or wound from plastic film. The insertion member 20 may also be formed from a combination of paper and plastic. The insertion member 20, also commonly referred to as an outer tube, is fairly rigid and has a relatively small diameter of about 10 millimeters to about 20 millimeters. The insertion member 20 has a wall with a predetermined thickness of about 0.1 millimeters to about 0.7 millimeter. The wall can be constructed from a single ply of material or be formed from two or more plies that are bonded together to form a laminate.

The use of two or more plies or layers is preferred for it enables the manufacturer to use certain materials in the various layers that can enhance the performance of the tampon applicator 10. When two or more plies are utilized, all the plies can be spirally wound, convolutely wound or longitudinally seamed to form an elongated cylinder. For example, in some embodiments the wall can be constructed using a smooth thin ply of material on the outside or exterior surface that surrounds a coarser and possibly thicker ply. In embodiments where the wall contains at least three plies, the middle ply can be the thicker ply and the interior and exterior plies can be smooth and/or slippery to facilitate expulsion of the tampon and to facilitate insertion of the insertion member 20 into a woman's vagina, respectively. By sandwiching a thick, coarser ply of material between two thin, smooth plies, an inexpensive insertion member 20 can be provided which is very functional. The wall may contain one to four plies, although more plies can be utilized if desired. As well, the ends of the insertion member 20 can be lipped.

An adhesive, such as glue, or by heat, pressure, ultrasonics, etc, can hold the plies forming the wall together. The adhesive can be either water-soluble or water-insoluble. A water-soluble adhesive is typically used for environmental reasons in that the wall will quickly break apart when it is immersed in water. Such immersion will occur should the

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insertion member 20 be disposed of by flushing it down a toilet. Exposure of the insertion member 20 to a municipal's waste treatment plant wherein soaking in water, interaction with chemicals and agitation all occur, will cause the wall to break apart and evenly disperse in a relatively short period of time.

The inside diameter of the insertion member 20 is usually less than about 0.75 inches (about 19 mm) and may be about 0.394 inches (about 10 mm). Although the exterior diameter, of tampons does vary, most tampons utilized by women have an external of less than about 0.75 inches (about 19 mm). The measure of external diameter excludes the indentation region 32 of the fingergrasp region 26. However, if one desires to use this invention to administer medication to an animal, such as a farm animal or other mammal, larger size tampons, which would require insertion members with a larger diameter, could be used.

Alternatively, the material can be overlapped into a tubular configuration. Spirally or convolutely winding the insertion member 20 into a cylindrical tube is especially advantageous when the insertion member 20 is formed from a laminate. In the case of other tube construction methods such as fiber or plastic molding, or integral tube forming (e.g. thermoforming plastic) no seams will be present and the corrugations could optionally be formed as part of the tube molding or forming process.

The insertion member 20 is sized and configured to house an absorbent tampon. As stated above, the insertion member 20 should have a substantially smooth exterior surface that will facilitate insertion of the insertion member 20 into a woman's vagina. When the exterior surface is smooth and/or slippery, the insertion member 20 will easily slide into a woman's vagina without subjecting the internal tissues of the vagina to abrasion. The insertion member 20 can be coated to give it a high slip characteristic. Wax, polyethylene, a combination of wax and polyethylene, cellophane, clay, mica, and other lubricants are representative coatings that can be applied to the insertion member 20 to facilitate comfortable insertion.

The insertion member 20 has an outer surface 24 and a fingergrasp region 26 disposed about the outer surface 24. The insertion member 20 has an insertion end 32 opposed to a fingergrasp region 26. The fingergrasp region 26 comprises an indentation region 28 having a depth dimension X. The indentation region 28 may be any geometric shape known including but not limited to oval, circular, rectangular, trapezoidal, triangular, hemispherical and mixtures thereof. In some embodiments, the depth dimension X may range from about 1 mm to about 10 mm as measured from the outer surface of the insertion member 20 to the lowest point of the indentation region 28. In some embodiments, the depth dimension X may range from about 2 mm to about 5 mm as measured from the outer surface of the insertion member 20 to the lowest point of the indentation region 28. In other embodiments, the depth dimension X may range from about 2.5 mm to about 3.5 mm as measured from the outer surface of the insertion member 20 to the lowest point of the indentation region 28.

The indentation region 28 comprises raised portions 30 having a height dimension Y, the height dimension Y being less than or equal to the depth dimension X. The raised portions 30 may be any three-dimensional geometric shape known including but not limited to ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof. In all embodiments, the height dimension Y is less than or equal to the depth dimension X. In some embodi-

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ments, the height dimension Y is less than the depth dimension X. In some embodiments, the depth dimension Y ranges from about 0.1 mm to about 10 mm as measured from the base 34 to highest point 36 of the individual raised portion that is adjacent to the outer surface 24 of the insertion member 20. In some embodiments, the depth dimension Y ranges from about 0.2 mm to about 5 mm as from the base 34 to highest point 36 of the individual raised portion. In other embodiments, the depth dimension Y ranges from about 0.5 mm to about 2.5 mm from the base 34 to highest point 36 of the individual raised portion.

The number of the raised portions 30 may range from 1 to 200 depending on the size of both the indentation region 28 and the raised portions 30. The individual raised portions 30 may be formed to have essentially identical size and shape as compared to other individual raised portions 30. Alternatively, the individual raised portions 30 may be formed to have various sizes and shapes as compared to other individual raised portions 30. The raised portions 30 may be arranged randomly or in a pattern. For example, the raised portions 30 can be arranged to form any three-dimensional geometric pattern known including but not limited to flowers, ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof. Alternatively, these raised portions 30 may be randomly arranged so that the multiplicity of the molded or attached dimples may comprise merely a surface roughness in no apparent pattern. In addition, raised portions 30 may be arranged such that the areas between the raised portions 30 may form any geometric pattern known including but not limited to flowers, ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof.

All documents cited in the Detailed Description of the Invention are, in relevant part, incorporated herein by reference; the citation of any document is not to be construed as an admission that it is prior art with respect to the present invention.

While particular embodiments of the present invention have been illustrated and described, it would be obvious to those skilled in the art that various other changes and modifications can be made without departing from the spirit and scope of the invention. It is therefore intended to cover in the appended claims all such changes and modifications that are within the scope of this invention.

What is claimed is:

1. A tampon applicator comprising:

an insertion member adapted to house an absorbent tampon and receive a plunger;

said insertion member having an outer surface and a finger grip region extending inwardly from said outer surface and disposed between distal and proximal ends of said insertion member;

said finger grip region comprising an indentation region having a depth dimension X, wherein said depth dimension X is measured from the outer surface of insertion member to lowest point of indentation region;

said indentation region comprising protruding, three-dimensional raised portions that are positioned within said indentation region and having a height dimension Y, wherein said height dimension Y is measured from base to highest point of individual raised portion that is

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adjacent to outer surface of insertion member said height dimension Y being less than or equal to said depth dimension X.

2. The tampon applicator according to claim 1 wherein said tampon applicator is comprised of paper.

3. The tampon applicator according to claim 1 wherein said depth dimension X is from about 1 mm to about 10 mm.

4. The tampon applicator according to claim 1 wherein said height dimension Y is from about 0.1 mm to about 10 mm.

5. The tampon applicator according to claim 1 wherein the tampon applicator is comprised of plastic.

6. The tampon applicator according to claim 1 wherein the indentation region has a shape selected from the group consisting of oval, circular, rectangular, trapezoidal, triangular, hemispherical and mixtures thereof.

7. The tampon applicator according to claim 1 wherein the raised portions have a shape selected from the group consisting of ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof.

8. The tampon applicator according to claim 1 wherein the raised portions are arranged in a pattern.

9. A tampon applicator comprising:

an insertion member adapted to house an absorbent tampon and receive a plunger;

said insertion member having an outer surface and a finger grip region extending inwardly from said outer surface and disposed between distal and proximal ends of said insertion member;

said finger grip region comprising an indentation region having a depth dimension X, wherein said depth dimension X is measured from the outer surface of insertion member to lowest point of indentation region; said indentation region comprising protruding, three-dimensional raised portions that are positioned within said indentation region and having a height dimension Y, wherein said height dimension Y is measured from base to highest point of individual raised portion that is adjacent to outer surface of insertion member said height dimension Y being less than said depth dimension X.

10. The tampon applicator according to claim 9 wherein said tampon applicator is comprised of paper.

11. The tampon applicator according to claim 9 wherein said depth dimension X is from about 2 mm to about 5 mm.

12. The tampon applicator according to claim 9 wherein said height dimension Y is from about 0.2 mm to about 5.0 mm.

13. The tampon applicator according to claim 9 wherein the raised portions are arranged in a pattern.

14. The tampon applicator according to claim 9 wherein the patterns are selected from the group consisting of flowers, ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof.

15. A tampon applicator comprising:

an insertion member adapted to house an absorbent tampon and receive a plunger;

said insertion member having an outer surface and a finger grip region extending inwardly from said outer surface and disposed between distal and proximal ends of said insertion member;

said finger grip region comprising an indentation region having a depth dimension X, wherein said depth dimension X is measured from the outer surface of insertion member to lowest point of indentation region; said indentation region comprising protruding, three-dimensional raised portions that are positioned within

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said indentation region and having a height dimension Y, wherein said height dimension Y is measured from base to highest point of individual raised portion that is adjacent to outer surface of insertion member said height dimension Y being less than or equal to said depth dimension X;

wherein said tampon applicator is comprised of paper.

16. The tampon applicator according to claim **15** wherein said depth dimension X is from about 2.5 mm to about 3.5 mm.

17. The tampon applicator according to claim **15** wherein said height dimension Y is from about 0.5 mm to about 2.5 mm.

18. The tampon applicator according to claim **15** wherein the indentation region has a shape selected from the group

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consisting of oval, circular, rectangular, trapezoidal, triangular, hemispherical and mixtures thereof.

19. The tampon applicator according to claim **15** wherein the raised portions have a shape selected from the group consisting of ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof.

20. The tampon applicator according to claim **15** wherein the raised portions are arranged in a pattern selected from the group consisting of flowers, ovals, circles, rectangles, trapezoids, triangles, cones, alphabet letters, and mixtures thereof.

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